

ABSTRACT OF THE DISCLOSURE

The present invention is drawn to methods and compounds for photodynamic therapy (PDT) of a target tissue or compositions in a mammalian subject, using a light source that preferably transmits light to a treatment site transcutaneously. The method provides for administering to the subject a therapeutically effective amount of a targeted substance, which is either a targeted photosensitizing agent, or a photosensitizing agent delivery system, or a targeted prodrug. This targeted substance preferably selectively binds to the target tissue. Light at a wavelength or waveband corresponding to that which is absorbed by the targeted substance is then administered. The light intensity is relatively low, but a high total fluence is employed to ensure the activation of the targeted photosensitizing agent or targeted prodrug product. Transcutaneous PDT is useful in the treatment of specifically selected target tissues, such as vascular endothelial tissue, the abnormal vascular walls of tumors, solid tumors of the head and neck, tumors of the gastrointestinal tract, tumors of the liver, tumors of the breast, tumors of the prostate, tumors of the lung, nonsolid tumors, malignant cells of the hematopoietic and lymphoid tissue and other lesions in the vascular system or bone marrow, and tissue or cells related to autoimmune and inflammatory disease.